Access to Microfinance & Improved Implementation of Policy Reform (AMIR Program)

Funded By U.S. Agency for International Development

Business Plan for the Computerization and Connectivity of Jordan's Schools Phase I

Final Report

Deliverable for Policy Component, Task No. 4.6.20
Contract No. 278-C-00-98-00029-00

March 2001

This report was prepared by Jesse Rodriguez, in collaboration with Chemonics International Inc., prime contractor to the U.S. Agency for International Development for the AMIR Program in Jordan.

Any questions regarding this document can be directed to Jesse Rodriguez at jesse@eddsnet.com.

Table of Contents

Executive Summary 2

Key Findings 2

Phase I Business Plan 5

Planning 5

Assessing 5

Changing 5

Evaluating 5

Findings and Recommendations 7

Appendix A – Process Model Overview 10

Planning 10

Assessing 10

Changing 10

Evaluating 11

Phase Descriptions 11

Planning 11

Assessing 14

Changing 16

Evaluating 18

Appendix B – MOE Full Project Plan 21

Appendix C – Technology Committee Agenda Minutes 25

Executive Summary

Enclosed are the findings of a twenty-one day visit to Amman, Jordan, undertaken in February — March 2001, to assist the kingdom's Ministry of Education in developing a business plan for its educational technology programs. This document is a continuation of work already done during September and October 2000, the outcome of which was a document entitled ***Strategic Plan for the Computerization and Connectivity of Jordan's Primary Schools*** commissioned by AMIR Program under contract No. 278-C-00-98-00029-00 which is a deliverable for Policy Component, Task No. 4.6.20. The primary task commissioned by AMIR Program for this particular phase of the project was to develop a detailed timetable for the coming year for those programs already committed to as well as new programs currently in the pipeline. Due to the ambitious plans laid out by the Ministry of Education this document will look forward only one year and will be referred to in this document as Phase I. Phase I will deal primarily with issues related to establishing a sound IT infrastructure on which to build the Ministry's ambitious administrative and instructional initiatives.

Access to key individuals was provided. The following is the list of individuals that participated in the meetings:

- Dr. Khaled Toukan, Ministry of Education
- Dr. Bassam Kahhaleh, University of Jordan
- Mr. Jesse Rodriguez, AMIR Program
- Dr. Ziad Al- Qadi, Ministry of Education.
- Dr. Ahmad Hiasat, Princess Sumaya University
- Mr. Abdel-Kareem Al-Azzam, Ministry of Education
- Mr. Baha Tahboub, Ministry of Education
- Dr. M.T. Barakat, Ministry of Education
- Nelson Ireland, Canadian Embassy
- Cathryn Goddard, AMIR Program

The majority of these individuals met nearly every working day to assist and provide guidance in the development of the Ministry's detailed business plan.

This document has been laid out into four component parts: a narrative, a detailed explanation of the business process employed to put together this plan, the project plan in Microsoft Project format and copies of the meeting agendas so that the reader could derive some understanding of how this process developed.

Key Findings

The most obvious finding that came out of this process is that the Ministry has extremely ambitious plans for restructuring the teaching and learning process to meet the needs of Jordan in the coming twenty years yet it doesn't have the resources, either human or continuous capital, to effectively implement all that it would like to. In addition, many of the Ministry's plans require that there be a sound infrastructure in place before being able to proceed. Because of this, the committee decided to segment the plan into phases. Phase I, which this document deals with, will concentrate on the completion of current initiatives in place as well as those that are in process and are expected to begin within the coming year. This is a proper approach as it is clear that the Ministry's most pressing issues revolve around the creation of a stable IT infrastructure and this document puts

great emphasis in ensuring that such an infrastructure can be created so as to create the bedrock for all the other initiatives, both administrative and instructional, that will naturally develop over the coming years.

Having mapped out the tasks currently in process and which must be completed over the coming year, three issues begin to emerge. First, the Ministry has several large programs in place that, because of their complexity, will make them difficult to complete in the originally proposed timeframe. Second, the Ministry is currently short staffed and resourced to effectively implement the current initiatives. Finally, and this is related to the second issue, the Ministry needs to give serious thought to how it will be able to complete some of its initiatives in light of the fact that much of the required expertise necessary to bring many of the initiatives to completion is non-existent in the public sector and will probably be difficult to find even within Jordan's private sector.

It is imperative that these issues be dealt with early on because of the impact this Ministry is going to have on Jordan as a whole. This Ministry will be by far the largest user of IT, both public and private, in Jordan once its plans are realized. In addition, much of His Majesty's plans rest on having an educated populace to bring to fruition the outcomes enumerated in the ***REACH 2.0*** document and the ***Jordan Vision 2020 Plan***. In light of this, it is important to realize that much of what the Ministry wants to accomplish is not a core competency and serious thought should be given to concentrating resources, both capital and human, primarily in the teaching and learning arenas and not in developing a tremendous amount of internal IT expertise. So, even though the tasks identified for completion as part of Phase I Implementation have been incorporated into the business plan, serious thought should be given to outsourcing many of these tasks instead of trying to complete or build them internally from scratch. The Ministry should look towards an environment where it manages IT the creation and management of IT tasks instead of trying to build that expertise internally.

Finally, it should be reemphasized that this document should be viewed as a first phase of many phases that the Ministry will need to undertake to achieve its objectives. This will be an iterative process and it should be noted that while there are numerous recommendations contained within this document on how the Ministry should restructure itself to prepare to effectively use and manage information technologies, much of what the Ministry needs to do to make these recommendations a reality is simply not possible today. Again, this is due in part to current practices and processes as well as the lack of necessary expertise. However, this plan should provide guidance as to how, what and when the Ministry should do to go about getting the resources that it needs.

It should be clear that this phase is critical to the successful development of an IT infrastructure for the Ministry. It is through this process that the Ministry goes from deciding what it wants to do to how it wants to do it. With the development of this business plan, the Ministry will now have timelines, have a deeper understanding of needed resources – both external and internal – for successfully implementing this first phase allowing for the Ministry to bring into play the other initiatives that the Ministry is currently working on which are not technology related. This business plan, where appropriate, has been developed with linkages between associated tasks so that changes in start or stop dates will be reflected across the entire project timeline.

As well, the successful implementation of this process should provide Ministry staff with the expertise to employ the same tactics learned from this exercise to future projects. To that end, a detailed description of business process employed during the development of Phase I has been provided to ensure that the Ministry has a template for future projects.

Finally, it was not the intention of the committee working on this plan to disregard the Ministry's instructional related needs. Clearly, the Ministry is under pressure to show results in this arena. However, it was the stated position of the committee that much of what the Ministry needs to do to implement a sound instructional component will require a sound technology infrastructure to allow for the unfettered exchange of information throughout the Ministry. This in turn will require that serious attention be paid to the requisite policy changes that will be needed as the Ministry goes about the process of restructuring to fully exploit what its technology programs have wrought. It is strongly recommended that a parallel track be started as soon as possible to identify and develop a strong policy component plan that will align the Ministry's business and instructional processes with its technology as it goes about the process of bringing on-line this and subsequent phases. This process should be closely aligned with the ***Jordan Vision 2020 Plan***.

Phase I Business Plan

In developing Phase I of the MOE's Business Plan it was imperative that a framework be used that would drive process improvement throughout the organization with goals of better planning quality, lower development and maintenance costs, shorter time to "market", and increased predictability and controllability of projects and processes. To that end, the development of this business plan was broken down into four sub-phases:

- Planning
- Assessing
- Changing
- Evaluating

Each of the phases can be viewed in the context of a structured approach in the preparation of identifying and developing the level of organizational readiness needed to introduce new or changing technologies into the MOE's environment and business practices. In the process of working through each of the sub-phases, this framework offers guidance to ensure that the organization has the capability to absorb the change required for full-scale adoption.

It would prove useful to provide a quick look at what each phase entails and how these four sub-phases interoperate.

Planning

In many ways this is the most important phase. The objective here is to determine what it is that the organization wants to accomplish. Here the business and IT goals are aligned with the organizations capabilities. As well, it is here where a shared vision is developed of what the organization will look like when the planning process is complete.

Assessing

Of course, the organization needs to determine to what extent it can deliver on the vision. Through assessment and review, a capabilities and competencies map that provides the organization with an honest assessment, a gap analysis, of its ability, both from a human and capital resource viewpoint, to actually implement the new, shared vision for the organization.

Changing

The objective here is that through change and learning, the organization transitions from where it is to where it wants to be, thus bridging the gap defined in the first two phases. A major component of this phase is to do a comprehensive readiness review.

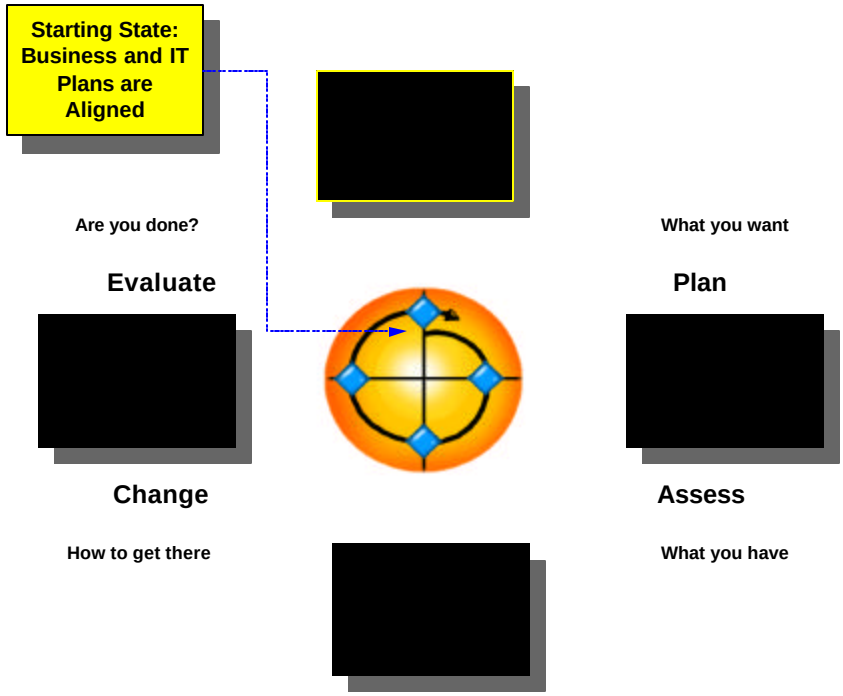
Evaluating

It is in this last phase that one determines whether the objectives have been achieved. Done correctly it is here where the organization integrates what it has learned from this

process back into the "collective conscious" of the organization to make the next project more successful.

A graphical representation of these four phases follows:

Activity Phases With Key Objectives and Milestones



Appendix A provides a more thorough review of the business process phases used to develop the Ministry's business plan. This process overview document has been provided for use by Ministry as basis of instituting a formalized process for continuous improvement as it moves forth with additional projects in the future.

Findings and Recommendations

Using the business process overview as a guideline for developing an implementation timeline, the committee proceeded to map out those issues related to infrastructure since as stated earlier without a sound IT infrastructure much of what the Ministry would like to accomplish instructionally will simply not be possible. In addition, it was decided that the only items that would be dealt in this first phase would be those projects or initiatives that were already in place or which would begin during 2001.

Using Microsoft's Project 98, the committee proceeded over a period of a week and a-half to map out key infrastructure initiatives. Only a subset of the completed project plan is included in this document. This document looks out only to December 2002 in the interest of keeping it in an easy to use format. The complete working MS project file is entitled ***MOE Year 2001 Full Project Plan*** and is included in diskette format as part of this document. It is hoped that this file is used by the Ministry as it moves forward with the initiatives contained therein and that the plan is kept up to date, modified as needed, and serve as starting point for future MOE initiatives.

Five key initiatives emerged as the committee proceeded with the development of the MOE business plan. They are:

- Installation of twenty-seven thousand PC's
- New Deal Program (retrofitting of existing MOE PC's)
- Bringing Directorates on-line
- Bringing Resource Centers on-line
- Develop RFP for replacement of current MOE software systems

The first four initiatives are already in progress and the last one, the development of the RFP, because of the complexity of the project will need to be started this year in order to be realistically brought on-line by January 2004.

It should be noted that project plan does not include resource detail. The project plan file has areas set aside for MOE staff to fill this information in as it becomes available. The first set of resources that should materialize will be as an offshoot of the three-day retreat March 1 – 3, 2001. The retreat should afford the Ministry with a better idea of who will be responsible for specific tasks within the identified initiatives. This should be incorporated into the project file as they become available. As well, the Canadians will be working with Ministry staff and this will have an impact on the resources available to the Ministry but which could at the time of the creation of this document could not be determined.

With that said, the following areas are being highlighted in this document for the Ministry to take particular attention to.

First off, this document has strived to provide accurate timelines to the initiatives contained within. This was a cause of a great deal of discussion within the group as there appears to be great pressure to have shorter timeframes than what the group was able to come up with once an in-depth analysis of the tasks required to bring the initiative to completion was worked out. Part of the reason for this is that Ministry is dependent on factors outside of its control, i.e., the Spanish and Japanese governments. In addition,

the Ministry is poorly resourced especially from a human perspective both in terms of number of individuals and the skill sets needed to implement the initiatives.

For this reason, attention should be given to looking outside the Ministry for the completion of specific parts of the initiatives contained within. Any task that is not core to the functioning of the Ministry should seriously be considered for outsourcing. Realistically, much of what the Ministry needs to accomplish related to IT is not core to the organization. As a public institution it is unlikely that it will be able to be competitive in terms of salary offered. As well, the required level of expertise needed to build systems in the coming years will increase exponentially. Again, the private sector is more likely to be in a position to meet the Ministry's needs.

Specifically, serious consideration should be given to outsourcing the technical assistance that will be required to support the Directorates once they are all brought on-line. It is the intention of the Ministry to hire 28 technicians (ID 40 in the project plan). A better solution would be to out source this task to the private sector where the level of expertise should be better able to provide better service due to increased expertise. Of course, it is possible that in some of the outlying areas of Jordan it might be difficult to find someone in the private sector willing to provide support at any price. In these cases, the Ministry will need to hire internally but then particular attention should be given to providing appropriate training to these individuals (ID 41 in the project plan.)

Of greater impact to the Ministry will be the decisions made as it goes about replacing the current applications in use today. It is strongly recommended that the Ministry look to commercial applications to replace its currently administrative and instructional management programs (ID 56 in the project plan.) With the decision to standardize on NT SQL, the Ministry should look to applications that will operate on Windows 2000 and SQL. This will allow the organization to acquire software that will meet most of its needs while allowing for the creation of bridging programs developed either internally or externally which will interoperate with whatever packages are selected by the Ministry to conduct its administrative and instructional functions.

While not included in the project plan, the following functions should be part of the RFP released to find software to meet the Ministry's business function and student record management needs. The list is not all-inclusive but should provide the committee tasked with putting together the RFP with some ideas of what needs to be in the RFP proposal.

- Business Services
  - Human Resources
    - Certifications
    - Employee Demographic Information
    - Health Insurance
  - Finance
    - Payroll
    - Benefits
  - Maintenance
    - Inventory
  - Food Service
    - Free & Reduced Lunch Programs
  - Purchasing
  - Transportation
  - Busing
    - Route Planning

- Mobile PC Labs
- Engineering
- Planning Services

- Student Record Management
  - Computerization of Examinations
  - Computerized Attendance
  - Computerized Grades
  - Computerized Registration
  - Computerized Scheduling
  - Computerized Transcripts
  - Sport Activities
  - Library Management
  - Curriculum
  - Staff Development
  - Extra Curriculum Activities
  - Literacy Programs
  - Special Education
  - Communications
    - Teacher / Student
    - School / Home
  - PTA
  - Distance Learning
  - Home Access
  - Surveys
  - K-12 Curriculum Development
  - Student Contests
  - Partnership Management
  - Criterion Reference Testing
  - Office Automation
  - Certification of IT Staff
  - Management of Training Facilities
  - Student Computer Literacy Program
  - Computer Based Learning
  - Educational Facilities and Materials (textbooks)

Whatever items are finally arrived at in the RFP, they need to be incorporated into the project plan with the accompanying timelines and resources.

Appendix A – Process Model Overview

In order to provide an overview of the process model, we must first define the concept of an organizational scenario within this context. For our purposes, an organizational scenario is the introduction of any new technology into a given organization. This technology change should support a business goal. It could be a new or updated line-of-business (LOB) application, a new server or network hardware, support tool changes, a development project, or a similar change. This broad definition of an organizational scenario represents the fundamental principle of managing changes in people, processes, and technology in the provision of service solutions.

Planning

A prerequisite to the process model is the completion of the alignment between the business plan and the IT plan. This alignment is critical, as it will set the vision and the stage to define the organization's goals. This is the beginning of the *planning* phase. In this phase, characterized as "What You Want," the implementation team envisions what the organization and the individuals within it will look like and how it will behave when the technology adoption is complete. The team identifies the processes, people, and practices that need to be in place to provide the appropriate capabilities to the organization. This phase culminates with the milestone of a capabilities and competencies map

Assessing

A capabilities and competencies map centers around the key organizational capabilities previously mentioned and includes classifying the current climate of the organization, the culture, the level of leadership within the IT organization and in the broader context of the organization, and the level of alignment between the IT plans and the "business owners" as they exist today. Specifically, during this exercise one identifies the capability of the organization to change to support the new technology, and the competency level of the individuals within the IT organization. It facilitates an understanding of where the organization is today; setting a baseline for understanding how wide the gap is between the vision of tomorrow and the reality of today. This is the beginning of the *assessing* phase. This phase, characterized as "What You Have," culminates with the next milestone, a complete gap analysis.

Changing

The *gap analysis* highlights the variance between what it will take to attain the project vision and the current state of the organization. Management and leadership commitment will be crucial to moving through the next phase. It is important to understand this gap and the potential cost associated with bridging it in order to make the right decisions about the organization. Decisions made based on the gap analysis lead into the *changing* phase. In this phase, the organization may decide to modify the leadership, culture, process, skills, hardware, or software requirements within the IT organization to better support the technology adoption and utilization. These modifications can take the form of activities such as training the staff and increasing their competency, enabling them to sustain a higher level of performance.

While modification of processes, hardware, and software is relatively straightforward, many organizations struggle with effective ways of changing the less tangible assets such as culture, leadership, and skills. For this type of activity, *performance modifiers* can be

used to reinforce and sustain behavioral and cultural changes. Performance modifiers are tools, processes, or resources that can be applied to a culture to modify performance or behavior. The table below links the three less tangible organizational indicators to performance modifiers that are effectively used to drive new behaviors.

Key Organizational Indicators

Key organizational indicator	Performance modifiers
Culture	Rewards, recognition, pay, communication, executive sponsorship, organizational structure
Leadership	Rewards, recognition, pay, communication, executive sponsorship, organizational structure
Skills	Training and development, staffing and deployment, rewards, recognition

These modifiers are very powerful tools for driving your organization to action during the changing phase. This phase, characterized as the "What You Need to Do" phase, culminates with the next milestone, readiness review, in which the progress is evaluated.

Evaluating

The evaluation reviews the changes that the organization set out to implement in the previous phase. Using a project plan to track these changes along the way is critical to a successful implementation and process readiness. In this phase, called the *evaluating* phase, the individuals and the organization should have clear objectives for the desired change; these objectives should be *specific, measurable, actionable, result-bound,* and *time-bound (SMART)* so that it is clear when they have been achieved. This is an iterative life cycle, and, depending on the level of changes that an organization needs to make, several iterations of this cycle may be necessary before the organization reaches the final milestone, organization ready. When the organization reaches the evaluation phase, there is a reassessment; whether it is cursory or whether all affected teams cycle through the original assessment tools again will be a project determination. However the evaluation is conducted, the teams will either decide they are not ready and will cycle through the phases again, or they will decide the organization is ready to build, deploy, or manage the technology.

Phase Descriptions

This section further describes each phase in terms of its philosophy statement, definition, goal, associated phase milestone, organizational and individual activities, and the deliverables that guide these activities.

Planning

Philosophy statement: Given the rapid change in the business environment and the increasing need to keep pace with technological change, it should be routine for management to sit down with IT and formally review the business and organizational capabilities to ensure they are tightly aligned. Management should regularly outline the business goals of the organization and the competitive challenges they face. IT should provide a review of the technologies available to address the future needs and the actions already being taken to meet current needs.

Executive sponsorship for this effort is critical, as is frequent communication regarding the organization's values, business objectives, and technology goals.

Definition: Planning is a joint effort and cannot be achieved by either management or IT. During this phase, there needs to be a common vision and direction for the organization, as well as a shared understanding of how technology will support that direction and, in some cases, lead the organization.

Goal: The goal of this phase is a tight alignment between management and IT, a shared vision, shared goals, a clear business case, articulation of the desired outcome, and the organizational capabilities needed to support the vision.

Associated phase milestone: This phase is preceded by the integrated business and IT alignment and followed by a capabilities and competencies map.

Organizational activities: In this phase the organization clearly identifies and articulates the key shared vision, business scenarios, business goals, and level of capability/competency required for the organization's future state. The organization must also define the desired cultural inputs and level of leadership that it needs to provide within the organization. This phase is complete when the organization produces the capabilities and competencies map.

Individual activities: The activities in this phase that are targeted toward individuals include identifying the individual competencies needed in the future state, and the job roles affected by this shift.

Activities, Deliverables, Guidance, Tools, and Outputs of the Planning Phase

Activities	**Organization** Validate key business processes supported by technology Define future organizational capabilities requirements: • Enterprise wide • Change management • Individual **Individual** Define individual scenarios Define role cluster mapping Define competency Define proficiency
Deliverables	**Organization** Future organizational capabilities identified **Individual** Individual scenarios produced Occupation clusters mapped to team roles Competency lists produced Proficiency levels identified
Guidance	How to define the organizational and individual competencies and capabilities necessary to support the integrated plan How to ready your organization for change
Tools	Templates of recommended processes and teams in the accelerated solution and the characterized environment Templates of scenario-specific recommendations for: • Enterprise-wide capabilities • Solution design capabilities • Operational capabilities • Change management capabilities • Individual capabilities **Individual** Individual scenarios Role cluster map Competency lists Proficiency levels
Outputs	Future organizational capabilities Plan, schedule, and budget for assessment phase

Assessing

Philosophy statement: Moving an organization from where it is today to the new vision requires leadership and planning. It also assumes that there is an assessment or benchmark indicating the organization's current state. In order to truly understand where the organization is today, it is necessary to take the time to assess the organization and the skills of the individuals within it.

Definition: Assessments can be conducted in a number of ways. This model refers to individual as well as organizational assessments—the natures of these two are quite different. They can either be self-assessments, in which individuals rate themselves and their skills along a scale, or they can be tests whose results place an individual's competency on a scale. For the organization, there are several models for conducting an assessment. The result, however, will always be the placement of the individual or the organization on a scale of competence or capability.

Goal: The goal of this phase is to set the baseline to contrast the future state against. An assessment highlights where the organization is currently versus where it needs to be. The gap analysis identifies those areas that require change or improvement.

Associated phase milestone: This phase is preceded by the capabilities and competencies map and followed by the gap analysis.

Organizational activities: In this phase the organization identifies its capabilities, takes the assessment, and determines the investment it is willing to make and the budget required to achieve the defined scenario.

Individual activities: In this phase, the affected individuals take assessment tests and conduct self-assessments to determine their current level of competency.

Activities, Deliverables, Guidance, Tools, and Outputs of the Assessing Phase

Activities	**Organization** Conduct organizational assessment Evaluate human performance indicators (motivation, rewards, recognition) Identify organizational gaps between requirements and assessment results Analyze and prioritize gaps Rollup/track individual skills **Individual** Conduct assessments of individuals Identify individual gaps Analyze and prioritize gaps

Activities, Deliverables, Guidance, Tools, and Outputs of the Assessing Phase (continued)

Deliverables	**Organization** Templates for organizational capability reports and gap analysis Organizational assessment tool **Individual** Individual assessment tool
Guidance	Importance of assessing organizational capabilities How to effectively conduct assessments Understanding change capacity and capability Importance of evaluating human indicators/motivators (rewards, recognition, and so on) How to perform and analyze gap reports
Tools	**Organization** Assessments of scenario-specific recommendations for: • Enterprise-wide assessment • Solution design assessment • Operational assessment • Change management assessment Risk and enabler report Organizational gap analysis **Individual** Individual gap analysis Individual self-assessment Individual objective assessment
Outputs	**Organization** Organizational assessment summary • Individual skills assessment results • Change capacity and capability results Risk and enabler report Organizational gap analysis **Individual** Assessments of individuals per occupation cluster Individual gap analysis

Changing

Closing the gap between current and future

Philosophy statement: Change does not occur at one point in time; it is an evolution that occurs over time. The key to this phase is to set objective indicators that will help move the organization in the desired direction and set a strategy for continual movement and readiness. This phase requires strong leadership and support, and the organization must reward progress along the way.

Definition: In this phase, the change that the individual is undergoing is learning. The organization may be undergoing multiple types of changes to varying degrees—for example, changes in management practice, changes in software process, changes in employee performance recognition and measurement, or changes in organizational alignment.

Goal: The goal of this phase is to introduce the necessary level of change and learning into the organization to bridge the gap between the vision of the "desired state" and the reality.

Associated phase milestone: This phase is preceded by the gap analysis and followed by the readiness review.

Organizational activities: The activities that an organization may go through in this phase vary greatly. Depending on the state of the organization, widespread changes may need to occur that will involve other departments, like human resources, to be effective. In general, this phase looks to utilizing communication, education and training, roles and responsibility definition, knowledge transfer, and rewards and recognition to change the performance gap identified within an organization. The changes may be small if there was strong alignment between the business and IT prior to the introduction of the new technology.

Individual activities: The activities of the individuals include all forms of learning. Individuals may determine that they need to take time out for training activities, whether they are instructor-led, technology-based, or self-paced, or they may learn through practice labs, on-the-job training, or a multitude of other activities.

Activities, Deliverables, Guidance, Tools, and Outputs of the Changing Phase

Activities	**Organization** Establish goals of change phase Analyze and prioritize risk Identify/develop plans to address gaps: • Create organizational readiness plan (rewards, recognition, communication, training, and so on) • Implement approved action plans to address gaps • Determine individual readiness cost model (time allocation, outsourcing vs. recruiting) Determine and monitor change budget Monitor progress on activities and gather feedback on results Identify any new issues encountered along the way Conduct readiness review **Individual** Create learning plan Train, coach, practice, hands-on, learn Track progress
Deliverables	**Organization** Case studies Capabilities development plan and risks Readiness cost model (time allocation for training, outsourcing vs. recruiting) Readiness review summary **Individual** Personalized learning plan
Guidance	How to achieve organizational alignment Importance of managing organizational change Importance developing enterprise-wide capabilities Importance of solution development capabilities Importance of an operations infrastructure How to conduct a readiness review How to close the individual competency gap

Activities, Deliverables, Guidance, Tools, and Outputs of the Changing Phase (continued)

Tools	Templates for organizational readiness planning Capability development plans Readiness cost model Readiness review template Personalized learning plans
Outputs	Plan, schedule, and budget for change phase Periodic status reports on plans completed, budget used, and activity evaluation results Recap of new issues encountered, assessment of their importance

Evaluating

Philosophy statement: Evaluation is both an ending and a beginning. The organization evaluates how far it has come in achieving its objectives and what else still needs to happen to achieve the vision. This phase could be the end of the process; however, because we should believe that this is an iterative process, we should see the evaluation through the readiness review as a beginning and a chance to reassess competencies and activities and determine whether additional learning or change is required.

Definition: Evaluation is very similar to assessment. It is a stake in the ground that asserts the individual and organizational competencies of the organization.

Goal: The goals of this phase are to determine whether the vision described in the planning phase has been achieved and, if it hasn't, to assess the current state and start the process again focused on the additional identified needs. The organization may decide to formalize this assessment by iteratively conducting the original assessment tools or it may rely on the team to assess the readiness at a more cursory level. This is also a time to identify any additional needs or changes that arose as a result of the changes and to revisit the prioritized list from the original gap analysis to determine if the organization should now create change plans for those items originally placed lower on the list.

Associated phase milestone: This phase is preceded by the readiness review and followed by the determination that the organization is ready.

Organizational activities: In this phase, the organization brings the team back together to determine whether the results that they set out to achieve were actually achieved. This would include an evaluation, a postmortem, some formal or informal method of knowledge management, and reporting on key capabilities.

Individual activities: The individuals' activities in this phase may include some level of introspection and self-assessment to determine whether the learning was effective and then putting those new competencies to work. Individuals may decide it is a good time to get certified because they have done the learning, performed the key tasks, and have assimilated the knowledge.

Activities, Deliverables, Guidance, Tools, and Outputs of the Evaluating Phase

Activities	**Organization** Formulate recommendation on how best to proceed Create organizational knowledge sharing plan Evaluate ROI measures Identify further readiness opportunities Prioritize new issues and develop plans to address as warranted, and revisit unaddressed issues Conduct postmortems for each major action plan executed Mainstream changes into organizational activity Conduct final readiness review Perform transition planning **Individual** Create key learning awareness Certify or validate performance
Deliverables	**Organization** Final readiness review template **Individual** Certification
Guidance	How to manage enterprise knowledge How to identify further readiness opportunities How to interpret the readiness review
Tools	Risk assessment template Postmortem template
Outputs	Schedule and budget to address new issues as warranted Aggregate feedback from postmortem results Transition plan to build and/or manage new technology

As stated earlier, this process model is an iterative life cycle. To reinforce this point, the activities outlined above are introduced within their respective phase in the following diagram. The process model is meant to be an iterative process, which the organization cycles through multiple times, depending on the depth and breadth of changes required.

Organization

- Formulate recommendation on how best to proceed
- Create organizational knowledge sharing plan
- Evaluate ROI measures
- Identify further readiness opportunities
- Prioritize new issues and develop plans to address as warranted, and revisit unaddressed issues
- Conduct postmortems for each major action plan executed
- Mainstream changes into organizational activity
- Conduct final readiness review
- Perform transition planning

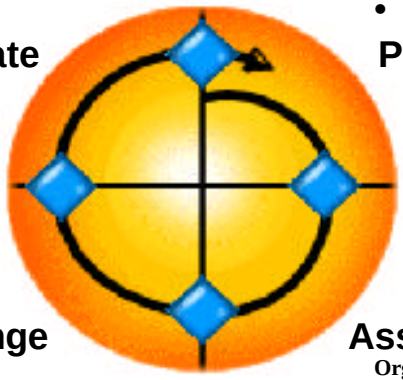
Individual

- Create key learning awareness
- Certify or validate performance

Organization Ready

Evaluate

Plan



Readiness Review

Capabilities & Competencies Map

Organization

- Validate key business processes supported by technology
- Define future-state organizational capabilities requirements

Individual

- Define individual scenarios
- Define role cluster mapping
- Define competency
- Define proficiency

Organization

- Establish goals of change phase
- Analyze and prioritize risk
- Identify/develop plans to address gaps
- Determine and monitor change budget
- Monitor progress on activities and gather feedback on results
- Identify any new issues encountered along the way
- Conduct readiness review

Individual

- Create learning plan
- Train, coach, practice, hands-on, learn
- Track progress

Change

Assess

Gap Analysis

Organization

- Conduct organizational assessment
- Evaluate human performance indicators
- Identify, analyze, and prioritize org gaps
- Rollup/track individual skills

Individual

- Conduct assessments of individuals
- Identify, analyze, and prioritize individual gaps

Appendix B – MOE Full Project Plan

As stated earlier, only a subset of the completed project plan is included in this Appendix. This document looks out only to December 2002 in the interest of keeping it manageable, easy to use and understandable. The complete working MS project file is entitled ***MOE Year 2001 Full Project Plan*** and is provided in a diskette included with this document.

Appendix C – Technology Committee Agenda Minutes

Minutes of the Business Plan Committee meetings are included and have been provided to give the reader a chronology of the worked performed and the outcomes arrived at by the committee.

Technology Business Plan Committee

2/18/2001
1 Hour, 20 Minutes
Ministry of Education

Meeting called by:	Dr. Toukan	**Type of meeting:**	Planning
Facilitators:	Dr. Bassam Kahhaleh / Jesse Rodriguez	**Note taker:**	Jesse Rodriguez
Attendees:	Dr. Bassam Kahhaleh, Mr. Jesse Rodriguez, Dr. Ahmad Hiasat, Mr. Abdel-Kareem Al-azzam, Mr. Baha Tahboub, Dr. Ziad Al-Qadi		
Please read:	Word Document - Business Model Overview		

----- Agenda Topics -----

Purpose of Meeting	Jesse Rodriguez / Dr, Bassam Kahhaleh	10
Business Plan Parameters	Jesse Rodriguez	10
First Draft of Plan	Group	45
General Discussion	Group	10
Next Steps	Group	5

Other Information

Technology Business Plan Committee

2/19/2001
9:30 AM to 10:30 AM
Ministery of Education

Meeting called by:	Dr. Toukan	**Type of meeting:**	Planning
Facilitator:	Dr. Bassam Kahhaleh / Jesse Rodriguez	**Note taker:**	Jesse Rodriguez
Attendees:	Dr. Bassam Kahhaleh, Mr. Jesse Rodriguez, Dr. Ahmad Hiasat, Mr. Abdel-Kareem Al-azzam, Mr. Baha Tahboub, Dr. Ziad Al-Qadi		

----- Agenda Topics -----

Recap of 2/18/2001 Meeting	Jesse Rodriguez	5
Discussion of long-range vision for Ministry	Group	40
General Discussion	Group	15

Other Information

Technology Business Plan Committee

2/19/2001
9:30 AM to 10:30 AM
Ministery of Education

Meeting called by:	Dr. Toukan	**Type of meeting:**	Planning
Facilitator:	Dr. Bassam Kahhaleh / Jesse Rodriguez	**Note taker:**	Jesse Rodriguez
Attendees:	Dr. Bassam Kahhaleh, Mr. Jesse Rodriguez, Dr. Ahmad Hiasat, Mr. Abdel-Kareem Alazah, Mr. Baha Tahboub, Dr. Ziad Al-Qadi		

---------- Agenda Topics ----------

Recap of 2/18/2001 Meeting	Jesse Rodriguez	5

Discussion: Dr. Bassam made the case for the development of a two-phase process in creating a strategic business plan. One track would be for academic needs the other for administrative. Also, there should be a creative effort to bring efficiencies to the organization by transforming it to an egovernment agency. Finally, there should be a plan for determining what a 21st Century graduate should look like.

Conclusions:

Action items:	Person responsible:	Deadline:

Discussion of long-range vision for Ministry	Group	40

Discussion: Discussed need to develop phase I of the ministry's long range strategic plan. We will be initially concentrating on infrastructure issues. Idea is to get all information together to determine where the gaps are and to develop areas where funding could be sought to have implementation take place.

Conclusions:

Action items: Get information on all directorates to see how they are connected or will likely be connected in the near future so that we can put this information into the overall plan for the ministry. Also, acquire a projection unit so that the group can work interactively with the project plan.	Person responsible: Mr. Baha Tahboub	Deadline: February 2(2001.

General Discussion	Group	15

Discussion: Ms. Katheryn Goodard made a presentation to the group to outline what the retreat will entail and the groups role within the retreat.

Conclusions:

Action items:	Person responsible:	Deadline:

Other Information

Technology Business Plan Committee

2/20/2001
9:30 AM to 10:25 AM
Ministery of Education

Meeting called by:	Dr. Toukan	**Type of meeting:**	Planning
Facilitator:	Dr. Bassam Kahhaleh / Jesse Rodriguez	**Note taker:**	Jesse Rodriguez
Attendees:	Dr. Bassam Kahhaleh, Mr. Jesse Rodriguez, Dr. Ahmad Hiasat, Mr. Abdel-Kareem Al-Azzam, Mr. Baha Tahboub, Dr. Ziad Al-Qadi		

----- Agenda Topics -----

Review of directorate mapping and of draft project plan.	Group	40
General Discussion	Group	15

Other Information

Review of directorate mapping and draft project plan.	Group	40

Discussion:

Conclusions:

Action items:	Person responsible:	Deadline:

General Discussion	Group	15

Discussion:

Conclusions:

Action items:	Person responsible:	Deadline:

Other Information

Technology Business Plan Committee

2/21/2001
9:00 AM to 9:55 AM
Ministery of Education

Meeting called by:	Dr. Toukan	**Type of meeting:**	Planning
Facilitator:	Dr. Bassam Kahhaleh / Mr. Jesse Rodriguez	**Note taker:**	Jesse Rodriguez
Attendees:	Dr. Bassam Kahhaleh, Mr. Jesse Rodriguez, Dr. Ahmad Hiasat, Mr. Abdel-Kareem Al-Azzam, Mr. Baha Tahboub, Dr. Ziad Al-Qadi		

----- Agenda Topics -----

Continuation of Project Plan Creation	Group	40
General Discussion	Group	15

Other Information

Technology Business Plan Committee

2/21/2001
9:00 AM to 9:55 AM
Ministery of Education

Meeting called by: **Type of meeting:**

Facilitator: **Note taker:**

Attendees:

---------- Agenda Topics ----------

Continuation of Project Plan Creation	Group	40

Discussion:

Conclusions:

Action items: Still need information on all directorates to see how they are connected or will likely be connected in the near future so that we can put this information into the overall plan for the ministry.	Person responsible: Mr. Baha Tahboub.	Deadline: February 2(2001.

General Discussion	Group	15

Discussion:

Conclusions:

Action items:	Person responsible:	Deadline:

Other Information

Technology Business Plan Committee

2/22/2001
9:30 AM to 10:00 AM
Ministry of Education

Meeting called by:	Dr. Toukan	**Type of meeting:**	Planning
Facilitator:	Dr. Bassam Kahhaleh / Mr. Jesse Rodriguez	**Note taker:**	Jesse Rodriguez

Attendees: Dr. Bassam Kahhaleh, Mr. Jesse Rodriguez, Dr. Ahmad Hiasat, Mr. Abdel-Kareem Al-Azzam, ~~Mr. Baha Tahboub~~, Dr. Ziad Al-Qadi, Dr. M.T. Barakat

---------- Agenda Topics ----------

Continuation of Project Plan Creation — Group — 60

Discussion: Received tentative plan for the bringing on-line of the directorates and discussed the likelihood that it would be completed as scheduled and certainly would it be done by the beginning of this coming school year.

Conclusions: It was the groups belief that at best only a few directorates would be up and running at the start of school.

Action items	Person responsible:	Deadline:

Technology Business Plan Committee

2/22/2001
9:30 AM to 10:30 AM
Ministry of Education

Meeting called by:	Dr. Toukan	**Type of meeting:**	Planning
Facilitator:	Dr. Bassam Kahhaleh / Mr. Jesse Rodriguez	**Note taker:**	Jesse Rodriguez
Attendees:	Dr. Bassam Kahhaleh, Mr. Jesse Rodriguez, Dr. Ahmad Hiasat, Mr. Abdel-Kareem Al-Azzam, ~~Mr. Baha Tahboub~~, Dr. Ziad Al-Qadi, Dr. M.T. Barakat		

----- Agenda Topics -----

Continuation of Project Plan Creation	Group	60

Other Information

Technology Business Plan Committee

2/25/2001
9:30 AM to 10:00 AM
Ministry of Education

Meeting called by:	Dr. Toukan	**Type of meeting:**	Planning
Facilitator:	Dr. Bassam Kahhaleh / Mr. Jesse Rodriguez	**Note taker:**	Jesse Rodriguez

Attendees: Dr. Bassam Kahhaleh, Mr. Jesse Rodriguez, Dr. Ahmad Hiasat, Mr. Abdel-Kareem Al-Azzam, ~~Mr. Baha Tahboub~~, Dr. Ziad Al-Qadi, Dr. M.T. Barakat

---------- Agenda Topics ----------

Continuation of Project Plan Creation — Group — 60

Discussion:

Conclusions:

Action items	Person responsible:	Deadline:
Jesse will put together a draft project plan for the committee to review and approve tomorrow.	Jesse Rodriguez	March 26, 2001.

Technology Business Plan Committee

2/25/2001
9:30 AM to 10:30 AM
Ministry of Education

Meeting called by:	Dr. Toukan	**Type of meeting:**	Planning
Facilitator:	Dr. Bassam Kahhaleh / Mr. Jesse Rodriguez	**Note taker:**	Jesse Rodriguez
Attendees:	Dr. Bassam Kahhaleh, Mr. Jesse Rodriguez, Dr. Ahmad Hiasat, Mr. Abdel-Kareem Al-Azzam, ~~Mr. Baha Tahboub~~, Dr. Ziad Al-Qadi, Dr. M.T. Barakat		

----- Agenda Topics -----

Continuation of Project Plan Creation	Group	60

Other Information

Technology Business Plan Committee

2/26/2001
9:30 AM to 10:00 AM
Ministry of Education

Meeting called by:	Dr. Toukan	**Type of meeting:**	Planning
Facilitator:	Dr. Bassam Kahhaleh / Mr. Jesse Rodriguez	**Note taker:**	Jesse Rodriguez

Attendees: Dr. Bassam Kahhaleh, Mr. Jesse Rodriguez, Dr. Ahmad Hiasat, Mr. Abdel-Kareem Al-Azzam, Mr. Baha Tahboub, Dr. Ziad Al-Qadi, Dr. M.T. Barakat

---------- Agenda Topics ----------

Review of Draft Project Plan	Group	60

Discussion:

Conclusions:

Action items	Person responsible:	Deadline:

Technology Business Plan Committee

2/26/2001
9:30 AM to 10:30 AM
Ministry of Education

Meeting called by:	Dr. Toukan	**Type of meeting:**	Planning
Facilitator:	Dr. Bassam Kahhaleh / Mr. Jesse Rodriguez	**Note taker:**	Jesse Rodriguez
Attendees:	Dr. Bassam Kahhaleh, Mr. Jesse Rodriguez, Dr. Ahmad Hiasat, Mr. Abdel-Kareem Al-Azzam, Mr. Baha Tahboub, Dr. Ziad Al-Qadi, Dr. M.T. Barakat		

----- Agenda Topics -----

Review of Draft Project Plan	Group	60

Other Information